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(12) United States Patent

Roeber et al.

(54) SYSTEM AND METHOD FOR DETERMINING AN INPUT SELECTED BY A USER THROUGH A VIRTUAL INTERFACE

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- (51) **Int. Cl.**

G09G 5/00 (2006.01)

341/21; 382/100

(58) **Field of Classification Search** 345/156–158, 345/168–170; 341/21–23; 382/100, 106 See application file for complete search history.

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(57) ABSTRACT

A system and method for determining which key value in a set of key values is to be assigned as a current key value as a result an object intersecting a region where a virtual interface is provided. The virtual interface may enable selection of individual key values in the set. The position is determined using a depth sensor that determines a depth of the position in relation to the location of the depth sensor. A set of previous key values that are pertinent to the current key value may also be identified. In addition, at least one of either a displacement characteristic of the object, or a shape characteristic of the object is determined. A probability is determined that indicates the current key value is a particular one or more of the key values in the set.

20 Claims, 8 Drawing Sheets

